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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,303	08/16/2001	Jui-Lung Chen	NAUP0303USA	8957
27765	7590	01/07/2004		
NAIPO (NORTH AMERICA INTERNATIONAL PATENT OFFICE)				
P.O. BOX 506				
MERRIFIELD, VA 22116				
EXAMINER				
LUI, AN T				
ART UNIT		PAPER NUMBER		
2816				

DATE MAILED: 01/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/682,303	CHEN ET AL.	
	Examiner	Art Unit	
	An T. Luu	2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7, 9 and 11-15 is/are rejected.
- 7) ☒ Claim(s) 4, 8 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-946) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. Figures 2 and 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 11-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Limitation “the *second* clock”, line 5 of claim 11, appears to be incorrect since “the second clock” is seen as an output of the delayer (line1). Thus, Examiner considers this limitation being “the *first* clock”.

Claims 12-15 are rejected for being dependent on the rejected claim, noted above.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 5-7, 9 and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by the Wu et al. reference (U.S. Patent 6,100,736).

Wu discloses in figure 1 a delay locked circuit for generating a second clock CLKCMP according to a first clock CLKSRC comprising a comparator 110 for determining if corresponding periods of the first clock and the second clock are synchronized and generating a corresponding comparison signal (U or D); a delayer 130 electrically connected to the comparator for delaying the first clock so as to change a delay time between the corresponding periods of the first clock and the second clock; and a controller 120 to control the delay locked circuit; wherein the controller uses the delayer to perform a correcting process to increase or decrease the delay time between the corresponding periods of the first clock and the second clock by a correction interval, wherein a subsequent correction interval of a subsequent correcting process is substantially half of a previous correction interval of a previous correcting process as required by claim 11. It is noted that col. 5, lines 61-67, and col. 6, line 66 to col. 7, line 4, indicate controller selectively activating one or more delay elements within a delay chain upon receiving a control signal from controller 120 and that there is one or more delay elements within the activated chain to be deactivated in the next clock cycle. Therefore, a subsequent correction interval (delay time) of a subsequent correcting process is substantially half of (i.e., less than) a previous correction interval of a previous correcting process.

As to claim 12, figure 5A and B of Wu shows details of delayer comprising a plurality of delay units (400's) wherein each of the delay units capable of increasing the delay time between the corresponding periods of the first clock and the second clock by a unit delay time.

As to claim 13, figure 1 shows shift register 120 to store information about the correction interval.

As to claims 1-3, 5-7 and 9, they are rejected as being directed to the method or/and steps derived from the apparatus described in claims 11-13 above (i.e., steps each having a one-to-one correspondence to the corresponding elements of the apparatus).

Allowable Subject Matter

6. Claims 4, 8 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 14-15 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to disclose an apparatus and method thereof comprising elements being configured as recited in claims. Specifically, none of the prior art teaches, among other things, the following limitations:

- Prior to the plurality of correcting processes, setting the correction interval to a predetermined initial value as required by claim 4.
- The period of the first clock corresponding to the period of the second clock leads the reference clock by a predetermined reference interval as required by claims 8 and 14.

- the controller terminates the correcting process if the correction interval is smaller than a predetermined value, the controller terminates the correcting process as required by claims 10 and 15.

Conclusion

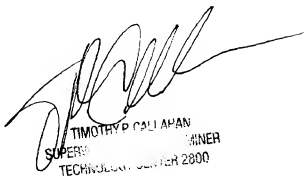
9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to An T. Luu whose telephone number is 703-308-4922. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 703-308-4876. The fax phone number for the organization where this application or proceeding is assigned is 703-308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

An T. Luu *AL*
12-18-2003


TIMOTHY P. CALLAHAN
SUPERVISOR
TECHNOLOGY CENTER 2800